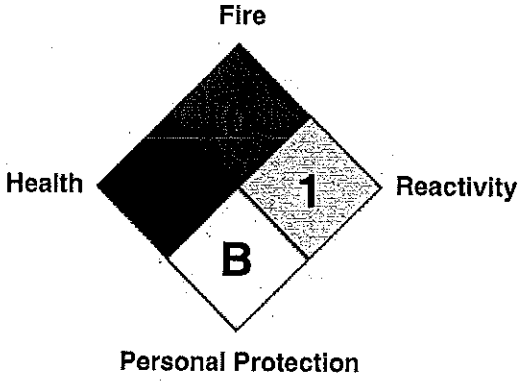
SUPERIOR
WELL SERVICES

HMIS Hazard Rating:

4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal



I. Chemical Product and Company Identification

Product Name:	OB Breaker (Ammonium Persulfate)
Identification #:	35-475-1102
Product Use/Class:	Gel breaker
Supplier:	Superior Well Services
Manufacturer:	Weatherford Fracturing Technologies
Emergency Contact:	CHEMTREC 1 (800) 424-9300
Prepared By:	RAA
Date Prepared:	03/25/2011

II. Composition/Information on Ingredients

Chemical Name:	Ammonium Persulfate
CAS Number:	7727-54-0
Percent by Mass Less Than:	60 - 100
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	NE
Threshold Limit Value - Short Term Exposure Limit:	NE
Permissible Exposure Limit - Time Weighted Average:	NE
Permissible Exposure Limit - Ceiling:	NE
Company Threshold Limit - Time Weighted Average:	NI
Skin:	NI

Chemical Name:	Ammonium Persulfate
CAS Number:	7727-54-0
Percent by Mass Less Than:	0.1%
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	-
Threshold Limit Value - Short Term Exposure Limit:	-
Permissible Exposure Limit - Time Weighted Average:	-
Permissible Exposure Limit - Ceiling:	-
Company Threshold Limit - Time Weighted Average:	-
Skin:	-

III. Hazardous Identification

Emergency Overview: DANGER - OXIDIZER

Effects of Overexposure

Toxic if swallowed. Corrosive. Causes skin and eye burns. Harmdul by inhalation, in contact with skin and if swallowed. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Strong oxidizer. Contact with other combustible material can cause fire.

Eye Contact: This product causes eye burns. Risk of serious damage to eyes. Do not get this material in contact with eyes.

Skin Contact: Causes skin burns. Do not get this material in contact with skin.

Inhalation: Causes burns. Do not breathe dust/fumes/gas/mist/vapors/spray.

Ingestion: Toxic if swallowed. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. Do not ingest.

Chronic Harards: None known.

Primary Route(s) of Entry:	☐ Skin Contact	■ Eye Contact	■ Ingestion
	☐ Skin Absorbtion	☐ Inhalation	

IV. First Aid Measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes.

Skin Contact: Immediately flush skin with plenty of water. Remove and isolate contaminated clothing and shoes. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing seperately before reuse.

Inhalation: Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocked mask equipped with a one-way valve or other proper respiratory medical device.

Ingestion: Get medical attention immediately. Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have the victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocked mask equipped with a one way valve or other proper respiratory medical device. Never give anything by mouth to a victim who is unconscious or is having convulsions.

V. Fire Fighting Measures

Flash Point:	201 °F (93.9 °C)
Auto Ignition Temperature:	N/A
Lower Explosive Temp.:	N/A
Upper Explosive Temp.:	N/A
Extinguishing Media:	Water. Dry chemical, CO2, water spray or regular foam.
Unusual Fire and Explosive Harards:	Containers may explode when heated. Some will react explosively with hydrocarbons (fuels). May explode from heat or contamination. Some may decompose explosively when heated or involved in a fire. Runoff may create fire or explosion hazard. These substances will accelerate burning when involved in a fire. Contact with combustile material may cause fire.
Special Fire Fighting Procedures:	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Do not move cargo or vehicle if cargo has been exposed to heat. If tank, rail car or tank truck is involced in a fire, ISOLATE for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or moniter nozzles. Move containers from fire area if you can do it without risk. For massive fire, use unmanned hose holders or moniter nozzles; if this is impossible, withdraw from area and let fure burn. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

VI. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:	*PERSONAL PRECAUTIONS: Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away. Isolate spill or leak area immediately for at least 50 to 100 meters (150-330 feet) in all directions. Stay upwind. Keep out of low areas. *ENVIRONMENTAL PRECAUTIONS: Runoff from fire control or dilution water may cause pollution. *METHODS FOR CONTAINMENT: Stop leak if you can do so without risk. Keep combustibles (wood, paper, oil..) away from spilled material. Prevent entry into waterways, sewers, basements or confined areas. *METHODS FOR CLEANING UP: Should not be released into the environment. Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation. After removal, flush contaminated area thoroughly with water. Clean up in accordance with all applicable regulations.

VII. Handling and Storage

Handling:	Do not handle or store near an open flame, heat or other sources of ignition. Keep away from clothing and other combustible materials. Use only with adequate ventilation. Wear self-contained breathing apparatus and protective suit. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid release to the environment. Do not get this material on clothing. Wash thoroughly after handling.
Storage:	Keep tightly closed in a dry, cool and well-ventilated place. Store in a closed container away from incompatible materials. Keep out of the reach of children. Store in accordance with local/regional/national/international regulation.

VIII. Exposure Controls/Personal Protection

Engineering Controls:	Ensure adequate ventilation, especially in confined areas.
Respiratory Protection:	When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided.
Skin Protection:	Do not get this material in contact with skin. Do not get this material on clothing. Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Wear appropriate chemical resistant gloves. Use chemical splash goggles and face shield (ANSIZ87.1 or approced equivalent). Structural firefighters protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations.
Eye Protection:	Do not get this material in contact with eyes. Wear cemical goggles & a face shield.
Other Protective Equipment:	N/A
Hygenic Practices:	Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. When using, do not eat or drink. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling and before eating.

IX. Physical and Chemical Properties

Boiling Point:	N/A	Vapor Density:	N/A
Odor:	Odorless.	Odor Threshold:	Not Determined
Appearance:	White crystals or powder.	Evaporation Rate:	Not Determined
Solubility in H20:	559 g/L	Specific Gravity:	Not Determined
Freeze Point:	Decomposes	pH at 50.0%:	N/A
Vapor Pressure:	N/A	Viscosity:	Not Determined
Physical State:	Solid		
Coefficient of Water Oil Distribution:	Not Determined		

X. Stability and Reactivity

Conditions to Avoid:	N/A
Incompatability:	Water, peroxides, strong oxidizing agents.
Hazardous Decomposition Products:	N/A
Hazardous Polymization:	Hazardous polymerization does not occur.
Stability:	N/A

XI. Toxicological Properties

Toxicological Properties:	No product information is available.
Oral:	Ammonium Persulfate: Oral LD50 Rat: 495 mg/kg
Dermal:	No product information is available.
Inhalation:	Ammonium Persulfate: Inhalation LC50 Rat:520 mg/L/1H

XII. Ecological Information

Ecological Properties:	No product information is available.
Ecotoxicity:	LC50 103 mg/L estimated, Fish, 96.00 hours. EC50 120 mg/L estimated, Daphnia, 48.00 hours. Components of this product have been identified as having potential environmental concerns.
Chemical Fate Information:	No product information is available.

XIII. Disposal Consideration

Disposal Method:	Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not hazardous waste according to Federal regulations (40 CFR 261.4 (B)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.
RCRA Status:	No product information is available.

XIV. Transportation Information

DOT Proper Shipping Name:	Ammonium persulfate
DOT Technical Name:	(blend)
DOT Hazard Class:	5.1
DOT Hazard Subclass:	
DOT UN/NA Number:	UN1444
Packing Group:	III
Resp. Guide Page:	

XV. Regulatory Information

OSHA:	29 CFR 1910.1200 hazardous chemical		
TSCA Status:	N/A		
CERCLA SARA:	Hazard categories: Immediate hazard - yes. Delayed hazard - yes. Fire hazard - yes. Pressure hazard - no. Reactivity hazard - yes.		
SARA Section 313 Required Reporting:	Chemical	CAS Number	WT/WT%
	Ammonium Persulfate	7727-54-0	0.1%

XVI. Other Information

Other Information: NA = Not applicable ND = Not Determined NI = No Information NE = Not Established

SUPERIOR
WELL SERVICES

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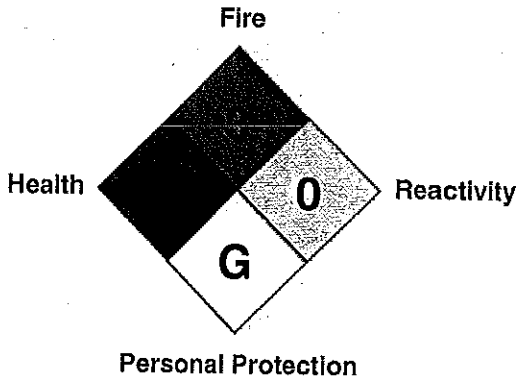

I. Chemical Product and Company Identification

Product Name:	Super MAX
Identification #:	35-525-0220
Product Use/Class:	Surfactant & Foamer
Supplier:	Superior Well Services
Manufacturer:	Weatherford Fracturing Technologies
Emergency Contact:	CHEMTREC 1 (800) 424-9300
Prepared By:	RAA
Date Prepared:	02/11/2008

II. Composition/Information on Ingredients

Chemical Name:	Isopropyl Alcohol
CAS Number:	67-63-0
Percent by Mass Less Than:	10-30
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	400 ppm
Threshold Limit Value - Short Term Exposure Limit:	500 ppm
Permissible Exposure Limit - Time Weighted Average:	400 ppm
Permissible Exposure Limit - Ceiling:	500 ppm
Company Threshold Limit - Time Weighted Average:	NI
Skin:	NI

Chemical Name:	Glycol Ethers
CAS Number:	111-76-2
Percent by Mass Less Than:	3-7
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	25 ppm
Threshold Limit Value - Short Term Exposure Limit:	NI
Permissible Exposure Limit - Time Weighted Average:	25 ppm
Permissible Exposure Limit - Ceiling:	NI
Company Threshold Limit - Time Weighted Average:	NI
Skin:	NI

Chemical Name:	Ethylhexanol
CAS Number:	104-76-7
Percent by Mass Less Than:	15-40
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	NE
Threshold Limit Value - Short Term Exposure Limit:	NE
Permissible Exposure Limit - Time Weighted Average:	NE
Permissible Exposure Limit - Ceiling:	NE
Company Threshold Limit - Time Weighted Average:	NE
Skin:	NI

Chemical Name:	Proprietary Component
CAS Number:	xxxxx-xx-x
Percent by Mass Less Than:	3-7
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	NE
Threshold Limit Value - Short Term Exposure Limit:	NE
Permissible Exposure Limit - Time Weighted Average:	NE
Permissible Exposure Limit - Ceiling:	NE
Company Threshold Limit - Time Weighted Average:	NE
Skin:	NI

III. Hazardous Identification

Emergency Overview:	No information.
Effects of Overexposure	
Eye Contact:	Liquid, aerosols and vapors of this product may be irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.
Skin Contact:	Brief contact may cause mild irritation. Prolonged contact may cause severe irritation and dermatitis. Allergic reactions are possible.
Inhalation:	May be harmful or fatal if inhaled. May be irritating or corrosive to mucos membranes respiratory passages.
Ingestion:	May be irritating to mouth, throat, and stomach.
Chronic Harards:	Overexposure may cause nervous system and kidney damage. May cause liver disorder (e.g. edema, proteinuria) and damage.

Primary Route(s) of Entry:	☐ Skin Contact	■ Eye Contact	■ Ingestion	
	■ Skin Absorbtion	■ Inhalation		

IV. First Aid Measures

Eye Contact:	No Information Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention if irritation persists.
Skin Contact:	Remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation persists.
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	If swallowed, induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Contact a poison control center of medical personnel immediately.

V. Fire Fighting Measures

Flash Point:	77F
Auto Ignition Temperature:	No Information
Lower Explosive Temp.:	No Information
Upper Explosive Temp.:	No Information
Extinguishing Media:	Alcohol Foam, CO2, Dry Chemical, Water Fog
Unusual Fire and Explosive Harards:	Vapors may form explosive mixture with air. "Empty" containers retain product residue (liquid and/or vapors) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC, ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum conditioner, or properly disposed of.
Special Fire Fighting Procedures:	No Information Containers can build up pressure if exposed to heat (fire). As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equvalent) and full protective gear. Use water spray to keep containers cool.

VI. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:	Eliminate all sources of ignition. Evacuate the area. Recover as much material as practical. Soak up the balance with sand, dirt, or other material and haul to approved dump.

VII. Handling and Storage

Handling:	Handle all chemicals with care. Ground and bond containers when transferring materials.
Storage:	Keep away from heat, sparks, and flames. Keep container closed when not in use. Store in a cool, dry, well ventilated place away from incompatible materials.

VIII. Exposure Controls/Personal Protection

Engineering Controls:	Local exhaust and ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.
Respiratory Protection:	A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection by air purifying respirators is limited.
Skin Protection:	PVC coated protective gloves, long sleeve shirt, trousers, and chemical resistant boots.
Eye Protection:	Wear splash-proof safety goggles and/or a full face shield when eye contact may occur.
Other Protective Equipment:	Emergency eyewash stations and deluge showers should be available in the work area.
Hygenic Practices:	Wash hands before eating. Use only with adequate ventilation. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material.

IX. Physical and Chemical Properties

Boiling Point:	ND	Vapor Density:	ND
Odor:	ND	Odor Threshold:	No Information
Appearance:	Yellow	Evaporation Rate:	No Information
Solubility in H20:	ND	Specific Gravity:	.94-.98
Freeze Point:	ND	pH at 50.0%:	7-9
Vapor Pressure:	ND	Viscosity:	No Information
Physical State:	Liquid		
Coefficient of Water Oil Distribution:	No Information		

X. Stability and Reactivity

Conditions to Avoid:	Avoid temperature extremes. Excessive heat causes the vapor pressure to increase rapidly.
Incompatability:	Strong acids, oxidizing materials.
Hazardous Decomposition Products:	Oxides of carbon.
Hazardous Polymization:	Will not occur.
Stability:	This product is stable under normal storage conditions.

XI. Toxicological Properties

Toxicological Properties:	No product information is available.
Oral:	No product information is available.
Dermal:	No product information is available.
Inhalation:	No product information is available.

XII. Ecological Information

Ecological Properties:	No product information is available.
Ecotoxicity:	No product information is available.
Chemical Fate Information:	No product information is available.

XIII. Disposal Consideration

Disposal Method:	Consult local, state, and federal regulatory agencies for acceptable disposal procedures and disposal locations. Disposal in streams or sewers may be prohibited by federal, state, and local regulations.
RCRA Status:	DOO1-Characteristic of ignitability.

XIV. Transportation Information

DOT Proper Shipping Name:	Flammable liquids, n.o.s.
DOT Technical Name:	(Contains Isopropanol)
DOT Hazard Class:	3
DOT Hazard Subclass:	
DOT UN/NA Number:	UN1993
Packing Group:	III
Resp. Guide Page:	

XV. Regulatory Information

OSHA:	No Information		
TSCA Status:	All components of this product are listed on the Toxic Substance Control Act Inventory or are excluded from the listing requirements.		
CERCLA SARA:	This product has been reviewed according to the EPA 'Hazard Categories' promulgated under the sections 311 and 312 of the Superfund Amendment and Reautorization Act of 1986 (SARA Title III) and is concidered, under applicable definitions, to meet the following categories: Chronic hazard, Fire hazard		
SARA Section 313 Required Reporting:	Chemical	CAS Number	WT/WT%
	Glycol Ethers	111-76-2	3-7
	Ethylhexanol	104-76-7	15-40

XVI. Other Information

Other Information: NA = Not applicable ND = Not Determined NI = No Information NE = Not Established

SUPERIOR
WELL SERVICES

HMIS Hazard Rating:

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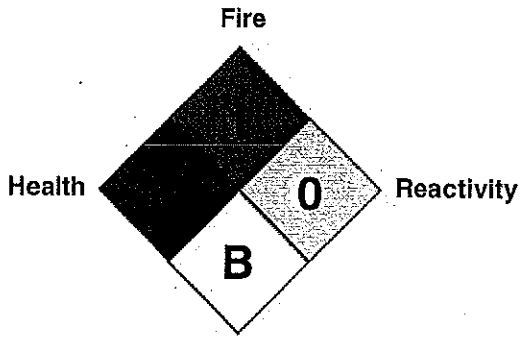

I. Chemical Product and Company Identification

Product Name:	XL-8
Identification #:	35-450-0088
Product Use/Class:	Crosslinker
Supplier:	Superior Well Services
Manufacturer:	Weatherford Fracturing Technologies
Emergency Contact:	CHEMTREC 1 (800) 424-9300
Prepared By:	RAA
Date Prepared:	02/28/2008

II. Composition/Information on Ingredients

Chemical Name:	Ethylene Glycol
CAS Number:	107-21-1
Percent by Mass Less Than:	10-30
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	None Established
Threshold Limit Value - Short Term Exposure Limit:	50 ppm
Permissible Exposure Limit - Time Weighted Average:	None Established
Permissible Exposure Limit - Ceiling:	50 ppm
Company Threshold Limit - Time Weighted Average:	None Established
Skin:	None Established

Chemical Name:	Proprietary Component
CAS Number:	XXXXX-XX-X
Percent by Mass Less Than:	3-7
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	None Established
Threshold Limit Value - Short Term Exposure Limit:	None Established
Permissible Exposure Limit - Time Weighted Average:	None Established
Permissible Exposure Limit - Ceiling:	None Established
Company Threshold Limit - Time Weighted Average:	None Established
Skin:	None Established

III. Hazardous Identification

Emergency Overview:	May cause eye and skin irritation.
Effects of Overexposure	
Eye Contact:	Severly irritating. If not removed promptly, product will injure eye tissue, which may result in permanent damage.
Skin Contact:	May cause skin irritation. Allergic reactions are possible.
Inhalation:	Prolonged inhalation may be harmful and can cause headaches, dizziness, nausea, decreased blood pressure, and changes in heart rate. May be irritating to mucous membranes and lung tissue.
Ingestion:	This material may be harmful or fatal if swallowed. May be irritating to mouth, throat, and stomach.
Chronic Harards:	Overexposure may cause nervous system damage, liver damage, lung damage, and/or kidney disorder and damage.

Primary Route(s) of Entry:	☐ Skin Contact	☐ Eye Contact	■ Ingestion	
	☐ Skin Absorbtion	☐ Inhalation		

IV. First Aid Measures

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention if irritation persists.
Skin Contact:	Remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation persists.
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

V. Fire Fighting Measures

Flash Point:	>200 F
Auto Ignition Temperature:	N/A
Lower Explosive Temp.:	N/A
Upper Explosive Temp.:	N/A
Extinguishing Media:	CO2, Dry Chemical, Foam, Water Fog
Unusual Fire and Explosive Harards:	Empty containers retain product residue and can be dangerous.
Special Fire Fighting Procedures:	As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equvalent) and full protective gear.

VI. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. (See exposure contros / Presonal protection section) Spilled material should be contained and disposed of according to applicable regulations.

VII. Handling and Storage

Handling:	Wash thoroughly after handling.
Storage:	Keep container closed when not in use. Store in a cool, dry, well ventilated place away from incompatible materials.

VIII. Exposure Controls/Personal Protection

Engineering Controls:	Local exhaust and vetalilation may be necessary to control any air contaminants to within their exposure limits.
Respiratory Protection:	Use a NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge when airborne concentrations are expected to exceed exposure limits. Protection by air purifying respirators is limited.
Skin Protection:	Where contact is likely, wear chemical resistant gloves and rubber boots.
Eye Protection:	Wear safety glasses with side shields (or goggles).
Other Protective Equipment:	Emergency eyewash stations and deluge showers should be available in the work area.
Hygenic Practices:	Wash hands before eating. Use only with adequate ventilation. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material.

IX. Physical and Chemical Properties

Boiling Point:	339-387 F	Vapor Density:	Not Determined
Odor:	None	Odor Threshold:	No Information
Appearance:	Light yellow	Evaporation Rate:	No Information
Solubility in H20:	Complete	Specific Gravity:	1.1050
Freeze Point:	Not Determined	pH at 50.0%:	6-8 @ 100%
Vapor Pressure:	N/A	Viscosity:	No Information
Physical State:	Liquid		
Coefficient of Water Oil Distribution:	No Information		

X. Stability and Reactivity

Conditions to Avoid:	Avoid temperature extremes and incompatibles.
Incompatability:	Avoid contact with strong acids and strong bases.
Hazardous Decomposition Products:	Oxides of carbon and nitrogen.
Hazardous Polymization:	Will not occur under normal conditions.
Stability:	This product is stable under normal storage conditions.

XI. Toxicological Properties

Toxicological Properties:	No product information is available.
Oral:	No product information is available.
Dermal:	No product information is available.
Inhalation:	No product information is available.

XII. Ecological Information

Ecological Properties:	No product information is available.
Ecotoxicity:	No product information is available.
Chemical Fate Information:	No product information is available.

XIII. Disposal Consideration

Disposal Method:	Consult local, state, and federal regulatory agencies for acceptable disposal procedures and disposal locations. Disposal in streams or sewers may be prohibited by federal, state, and local regulations.
RCRA Status:	Not Determined.

XIV. Transportation Information

DOT Proper Shipping Name:	Not DOT Regulated
DOT Technical Name:	
DOT Hazard Class:	
DOT Hazard Subclass:	
DOT UN/NA Number:	
Packing Group:	
Resp. Guide Page:	

XV. Regulatory Information

OSHA:	Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)		
TSCA Status:	All components of this product are listed on the Toxic Substance Control Act Inventory or are excluded from the listing requirements.		
CERCLA SARA:	This product has been reviewed according to the EPA 'Hazard Categories' promulgated under the sections 311 and 312 of the Superfund Amendment and Reautorization Act of 1986 (SARA Title III) and is concidered, under applicable definitions, to meet the following categories: Immediate Health Hazard.		
SARA Section 313 Required Reporting:	Chemical	CAS Number	WT/WT%
	Ethylene Glycol	107-21-1	10-30

XVI. Other Information

Other Information: NA = Not applicable ND = Not Determined NI = No Information NE = Not Established

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, or when used in conjunction with other products, exposures must be evaluated by the user so that appropriate handling practices and training programs can be established to ensure safe workplace operations. This information is confidential to Superior Well Services, Ltd. (SWSI) and intended solely for the use of the individual or entity to whom they are directly distributed. Distribution or use beyond the individual or entity is strictly prohibited without the consent of SWSI.

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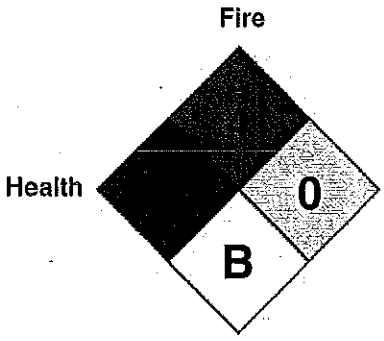


I. Chemical Product and Company Identification

Product Name:	OB Act 10X
Identification #:	35-475-1105
Product Use/Class:	Gel breaker
Supplier:	Superior Well Services
Manufacturer:	Superior Well Services
Emergency Contact:	CHEMTREC 1 (800) 424-9300
Prepared By:	RAA
Date Prepared:	09/11/2008

II. Composition/Information on Ingredients

Chemical Name:	Ethylene Glycol
CAS Number:	107-21-1
Percent by Mass Less Than:	2
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	NI
Threshold Limit Value - Short Term Exposure Limit:	50 ppm
Permissible Exposure Limit - Time Weighted Average:	NI
Permissible Exposure Limit - Ceiling:	50 ppm
Company Threshold Limit - Time Weighted Average:	NI
Skin:	No

Chemical Name:	Copper Sulfate
CAS Number:	7758-98-7
Percent by Mass Less Than:	3
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	1 mg/m3 (CU)
Threshold Limit Value - Short Term Exposure Limit:	NI
Permissible Exposure Limit - Time Weighted Average:	NI
Permissible Exposure Limit - Ceiling:	1 mg/m3 (CU)
Company Threshold Limit - Time Weighted Average:	NI
Skin:	No

Chemical Name:	Copper
CAS Number:	7447-39-4
Percent by Mass Less Than:	1
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	NI
Threshold Limit Value - Short Term Exposure Limit:	NI
Permissible Exposure Limit - Time Weighted Average:	NI
Permissible Exposure Limit - Ceiling:	NI
Company Threshold Limit - Time Weighted Average:	NI
Skin:	No
Chemical Name:	Sulfuric Acid
CAS Number:	NI
Percent by Mass Less Than:	1
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	NI
Threshold Limit Value - Short Term Exposure Limit:	NI
Permissible Exposure Limit - Time Weighted Average:	NI
Permissible Exposure Limit - Ceiling:	NI
Company Threshold Limit - Time Weighted Average:	NI
Skin:	NI
Chemical Name:	Methanol
CAS Number:	67-56-1
Percent by Mass Less Than:	25
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	200 ppm
Threshold Limit Value - Short Term Exposure Limit:	250 ppm
Permissible Exposure Limit - Time Weighted Average:	200 ppm
Permissible Exposure Limit - Ceiling:	200 ppm
Company Threshold Limit - Time Weighted Average:	NI
Skin:	NI

III. Hazardous Identification

Emergency Overview: Flamable liquid and vapor. Vapor is heavier than air and can travel considerable distances to a source of ignition and flash back. Material can burn with little or no visible flame.

Effects of Overexposure

Eye Contact: Severely irritating. If not removed promptly, product will injure eye tissue, which may result in permanent damage.

Skin Contact: Repeated or prolonged contact causes drying, brittleness, cracking, and irritation. Prolonged and repeated skin contact with methanol-soaked material has produced toxic effects including vision effects and death.

Inhalation: Extremely high levels cause stupor, headache, nausea, dizziness, unconciousness, and may produce adverse effects on vision.

Ingestion: Poisonous or fatal if swallowed. Get medical attention immediately. A small amount (usually two or more ounces) can cause mental sluggishness, nausea and vomiting leading to severe illness, and may produce adverse effects on vision with possible blindness or death if treatment is not received.

Chronic Harards: Methanol is slowly eliminated from the body, therefore can have cummulative toxic effects with repeated exposures. Persons with existing skin, kidney, liver or eye disorders may be at increased risk when exposed to methanol.

Primary Route(s) of Entry:	■ Skin Contact	■ Eye Contact	■ Ingestion
	☐ Skin Absorbtion	■ Inhalation	

IV. First Aid Measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention if irritation persists.

Skin Contact: Immediately wash with plenty of water and mild soap. Remove contaminated clothing and footwear. Wash clothing before reuse and discard any footwear which can not be decontaminated. Get medical attention if irritation persists.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. Keep the affected person warm and at rest.

Ingestion: Poison. Get medical attention immediately; call 911 if available. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconcious person.

V. Fire Fighting Measures

Flash Point:	11C (51.8F)
Auto Ignition Temperature:	385-446C (725F)
Lower Explosive Temp.:	6.0%
Upper Explosive Temp.:	36.0%
Extinguishing Media:	CO2, Dry Chemical, Water Spray, Alcohol Type Aqueous Film Forming Foam, Water Fog
Unusual Fire and Explosive Harards:	Partial oxidation of methanol can lead to the formation of formaldehyde, carbon monoxide, and formic acid. Methanol is TOXIC. Avoid all exposure, especially ingestion. Vapors may travel long distances along the ground before reaching a source of ignition and flash back. "Empty" containers retain product residue (liquid and/or vapors) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC, ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum conditioner, or properly disposed of.
Special Fire Fighting Procedures:	Evacuate area and fight from a maximum distance or use unmanned hose holders or monitor nozzles. ALWAYS stay away from the ends of "bullet" tanks. Water spray should be used to cool fire-exposed structures and vessels. Water spray can be used to reduce the intensity of flames and to dilute spills to a non-flammable mixture. Keep personnel removed from and upwind of fire. If potential for exposure to vapors or products of combustion exists, wear full fire fighting turnout gear and NIOSH approved self-contained breathing apparatus. Oxidizing chemicals may accelerate the burning rate in a fire situation. Vapor is heavier than air and can travel a considerable distance to a source of ignition and flashback. Material can burn with little or no visible flame.

VI. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:	Eliminate ignition sources. Avoid eye and skin contact; see section VIII for respirator information. Place leaking containers in well ventilated area with spill containment. If fire potential exists, blanket spill with alcohol-type aqueous film-forming foam or use water spray to disperse vapors. Contain spill to facilitate clean-up. Clean-up methods may include absorbent materials, vacuum truck, etc. Avoid runoff into storm sewers and ditches which lead to natural waterways. Depending on the size and nature of the release, all reaponders may need to be HAZWOPER trained and local, state, and federal authorities may need to be notified.

VII. Handling and Storage

Handling:	Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapor. Avoid contact with eyes, skin, or clothing. Wash throughly with soap and water after handling. Decontaminate soiled clothing throughly before re-use. Destroy contaminated leather clothing. DO not expose to temperatures above 120F. Do not handle near heat, sparks, or flame. Use spark-resistant tools. Do not load into compartments adjacent to heated cargo. Do not store in steel containers.
Storage:	Do not store with incompatible materials. Keep all containers tightly closed when not in use. Store out of direct sunlight and on an impermeable floor.

VIII. Exposure Controls/Personal Protection

Engineering Controls:	General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Explosion-proof equipment (fans, switches, etc.) should be used in mechanical ventilation systems.
Respiratory Protection:	Based on workplace contaminate level and working limits of the respirator, use a respirator approved by NIOSH. The following is the minimum recommended equipment for an occupational exposure level. For concentrations >=1 and <=100 times the acceptable level: use Type C full facepiece supplied-air respirtor operated in pressure-demand or continuous-flow mode. For concentrations >=100 times the acceptable level or greater than the IDLH level or unknown concentrations (such as in emergencies): use self-contained breathing apparatus with full facepiece in pressure-demand mode. Type C positive-pressure full facepiece supplied-air respirator with an auxiliary positive-pressure self-contained breathing apparatus escape system. For escape: use self-contained breathing apparatus with full facepiece or any respirator specifically approved for escape.
Skin Protection:	Wear impervious clothing and gloves to prevent contact. Butyl rubber is recommended. Other protective material may be used, depending on the situation, if adequate degredation and permeation data are available. If other chemicals are used in conjunction with this chemical, material selection should be based on protection for all chemicals present.
Eye Protection:	Wear chemical goggles when there is a reasonable chance of eye contact.
Other Protective Equipment:	Emergency eyewash stations and deluge showers should be available in the work area.
Hygenic Practices:	Wash thoroughly after handling.

IX. Physical and Chemical Properties

Boiling Point:	64.7C (148.3F)	Vapor Density:	1.1
Odor:	Mild alcohol odor	Odor Threshold:	100-160 ppm
Appearance:	yellow-green	Evaporation Rate:	2.1-2.6 Faster than Butyl Acetate
Solubility in H20:	Easily soluble in cold water.	Specific Gravity:	0.79-0.81
Freeze Point:	-98.7C (-144F)	pH at 50.0%:	No Information
Vapor Pressure:	97.68-100 mmHg	Viscosity:	.58 mPa.s (20C)
Physical State:	Liquid		
Coefficient of Water Oil Distribution:	P: 0.17; logP: -0.77		

X. Stability and Reactivity

Conditions to Avoid:	Heat, sparks, flames, and other sources of ignition. Avoid contact with strong oxidizers.
Incompatability:	Keep away from sulfuric and other strong inorganic acids; steel, aluminum or lead (including equipment made from these metals);keep away from magnesium, and oxidizing agents such as peroxides, nitric acid, perchloric acid or chromium trioxide. Keep away from strong bases. Avoid contact with strong acids, strong oxidizing agents, and strong caustics.
Hazardous Decomposition Products:	Carbon monoxide, formaldehyde, formic acid.
Hazardous Polymization:	Will not occur under normal conditions.
Stability:	This product is stable under normal storage conditions.

XI. Toxicological Properties

Toxicological Properties:	METHANOL Acute Exposure: Oral LD50: 6.2-12.98/kg (rats); practically nontoxic to animals. However, based on human exposure reports, a small amount (usually two or more ounces) can cause mental sluggishness, nausea, and vomiting leading to severe illness, and may produce adverse effects on vision with possible blindness or death if treatment is not received. Inhalation LC50: 64000 ppm (rats, 4 hours); practically nontoxic to animals. Based on human exposure reports, levels substantially above the TLV cause stupor, headache, nausea, dizziness, unconciousness, and may produce adverse effects on vision. Skin: Irritating to rabbit skin. Severity depends on the quantity administered and exposure period and is related to the defatting properties of methanol; not a skin sensitizer. Slightly toxic to animals minimum lethal dose, monkeys: 1.6 g/kg; LD50, rabbits: 16 g/kg. Based on human exposure reports, prolonged and repeated skin contact with methanol-soaked material has produced toxic effects including vision effects and death. Eye: Severely irritating to rabbit eye. Repeated exposure: Inhalation exposure (6 hours/day, 5 days/week) of monkeys to vapor concentrations of 500, 2000, or 5000 ppm for four weeks did not result in any treatment-related effects. Monkeys exposed to methanol vapors of 10, 100, or 1000 ppm for 22 hours/day for up to 2.5 years showed changes in the liver, kidney, and nervous system at 1000 ppm (limited details reported). Rats exposed by oral gavage to 100, 500, or 2500 mg/kg/day methanol for 90 days exhibited only effects on organ weight (brain) and serum enzymes (SGPT, AP) at the high dose. Mutagenicity: Not genotoxic in most in vitro assays. Not genotoxic in vivo in mice exposed via inhalation up to 4000 ppm (6 hours/day for 5 days) and subsequently examined for cytogenetic effects. Carcinogenicity: Inhalation - Not carcinogenic in lifetime inhalation studies (reported in limited detail) in rats and mice at concentrations of 10-1000 ppm. Dermal - Not carcinogenic in mice exposed dermally to 0.02 ml/day, 2 days/week over a lifetime in a study of limited quality. Reproductive/Developmental Effects: In an inhalation developmental toxicity study, rats were exposed 6 hours/day to 5000, 10000, or 20000 ppm vapors. A significant teratogenic response was seen at 20000 ppm. Fetotoxicity was noted at 10000 ppm, but not at 5000 ppm. In an inhalation developmental toxicity study, mice were exposed 7 hours/day to 2000, 500, or 10000 ppm vapors. Methanol caused severe developmental toxicity at all levels. Oral administration of methanol via gavage at 1.3, 2.6, or 5.2 ml/kg to rats resulted in developmental toxicity at all levels.
Oral:	Methanol LD50 is 5628 mg/kg (rat). Methanol LD50 is 7300 mg/kg (mouse). CUSO4 LD50: 300mg/kg (rat); LD50: 470 mg/kg (mammal); TDLO: 272 mg/kg (human-liver,kidney, blood effects); LDLO: 1088 mg/kg (human); LDLO: 60mg/kg (dog); LDLO: 1000mg/kg (pidgeon); LD50: 470mg/kg (mammal); LDLO: 300mg/kg (wild bird)
Dermal:	Methanol is a skin irritant. Absorption of methanol through the skin may add significantly to the overall toxic effect. Standard Draize skin test (rabbit) Dose: 20mg/24 hrs Reaction: Moderate CUSO4 LDLO guinea pig: 62 mg/kg
Inhalation:	The LC50 is 64000 mg/kg (rat).

XII. Ecological Information

Ecological Properties:	ENVIRONMENTAL FATE: Methanol The ability of animals and microorganisms to rapidly boidegrade methanol coupled with its low n-octanol/water partition coefficient is expected to lead to its rapid removal if released into the environment. CUSO4, however, is labeled a 'Marine Pollutant' and is expected to be toxic to aquatic life.
Ecotoxicity:	METHANOL ECOTOXICITY: Methanol exhibits low acute toxicity to aquatic species. The 24-, 48-, and 96-hour LC50 values for various fish species (bluegill sunfish, fathead minnows, rainbow trout, goldfish, carp, bleak, creek chub) are in the range 1700-28100 ppm. The 18-, 24-, and 48-hour EC50 values for the water flea (daphnids) are in the range 10000-24500 ppm. The 18-hour LC50 for the grass shrimp is 21900 ppm and the 24-hour LC50 for brine shrimp is >10000 ppm. Cell multiplication was inhibited after 8 days exposure to 8000 ppm and 530 ppm in the green algae and blue-green algae, respictively. CUSO4 Aquatic Toxicity Classificatin:LC50: 24 hour Daphnia Manga.182mg = Rainbow Trout, 17mg/Bluegill, 1.5mg
Chemical Fate Information:	DEGRADATION: Under aerobic conditions methanol is readily biodegradable. The 5-day BOD values are 48-83% of COD. Biodegradation also occurs under anaerobic conditions, e.g. 83-91% degradation in a marine water/sediment system after 3 days. Atmospheric photochemical degradation (half-life) is estimated to be 17.8 days. Volatilization half-lives of 4.8 days and 51.7 days have been estimated for a model river and a model pond, respectively. BIOACCUMULATION: The log n-octanol/ water partition coefficient for methanol is -0.77. This suggests that methanol has low potential to bioaccumulate.

XIII. Disposal Consideration

Disposal Method:	Consult local, state, and federal regulatory agencies for acceptable disposal procedures and disposal locations. Disposal should be conducted through a facility equipped with and operating an air emission control device in acordance with requirements of applicable Clean Air Act regulations.
RCRA Status:	No information.

XIV. Transportation Information

DOT Proper Shipping Name:	Environmentally hazardous substances, liquid, n.o.s.
DOT Technical Name:	Contains Copper Sulfate, Marine Pollutant
DOT Hazard Class:	9
DOT Hazard Subclass:	
DOT UN/NA Number:	UN3082
Packing Group:	III
Resp. Guide Page:	

DOT Proper Shipping Name:	Methanol
DOT Technical Name:	
DOT Hazard Class:	3
DOT Hazard Subclass:	
DOT UN/NA Number:	UN1230
Packing Group:	II
Resp. Guide Page:	

XV. Regulatory Information

OSHA:	Hazardous by definition of Hazard Communication definition: DANGER!
TSCA Status:	All components of this product are listed on the Toxic Substance Control Act Inventory or are excluded from the listing requirements.
CERCLA SARA:	This product has been reviewed according to the EPA 'Hazard Categories' promulgated under the sections 311 and 312 of the Superfund Amendment and Reautorization Act of 1986 (SARA Title III) and is concidered, under applicable definitions, to meet the following categories: Immediate Health Hazard, Chronic Health Hazard, Fire Hazard

SARA Section 313 Required Reporting:

Chemical	CAS Number	WT/WT%
Ethylene Glycol	107-21-1	2
Copper	7447-39-4	1
Methanol	67-56-1	25

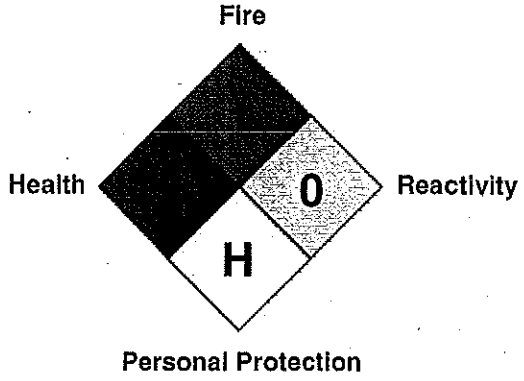
XVI. Other Information

Other Information: NA = Not applicable ND = Not Determined NI = No Information NE = Not Established

SUPERIOR
WELL SERVICES

HMIS Hazard Rating:

4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal



I. Chemical Product and Company Identification

Product Name:	LSG-100
Identification #:	00-000-0000
Product Use/Class:	Gelling Agent
Supplier:	Superior Well Services
Manufacturer:	International Polymerics, Inc.
Emergency Contact:	CHEMTREC 1 (800) 424-9300
Prepared By:	jps
Date Prepared:	12/02/2011

II. Composition/Information on Ingredients

Chemical Name:	Hydrocarbons
CAS Number:	64742-96-7
Percent by Mass Less Than:	40-70

Exposure Limits

Threshold Limit Value - Time Weighted Average:	N/A
Threshold Limit Value - Short Term Exposure Limit:	N/A
Permissible Exposure Limit - Time Weighted Average:	N/A
Permissible Exposure Limit - Ceiling:	N/A
Company Threshold Limit - Time Weighted Average:	N/A
Skin:	N/A

III. Hazardous Identification

Emergency Overview:	N/A

Effects of Overexposure

Eye Contact:	N/A
Skin Contact:	N/A
Inhalation:	N/A
Ingestion:	N/A
Chronic Harards:	N/A

Primary Route(s) of Entry:	☐ Skin Contact	■ Eye Contact	☐ Ingestion
	☐ Skin Absorbtion	■ Inhalation	

IV. First Aid Measures

Eye Contact:	Check for and remove any contact lenses. Flush with running water for at least 15 minutes. Do not use eye ointment. Seek medical attention.
Skin Contact:	After contact with skin, was immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reuse.
Inhalation:	Allow victim to rest in a well ventilated area. Seek medical attention.
Ingestion:	Seek medical attention if ingested. Induction of vomiting not required.

V. Fire Fighting Measures

Flash Point:	200° F closed cup.
Auto Ignition Temperature:	N/A
Lower Explosive Temp.:	N/A
Upper Explosive Temp.:	N/A
Extinguishing Media:	N/A
Unusual Fire and Explosive Harards:	N/A
Special Fire Fighting Procedures:	For small fires, use dry chemical powder. For large fires, use water spray, fog or foam. Do not use water jet.

VI. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:	For small spills, absorb with an inert material and put the spilled material in an appropriate waste disposal. For large spills, absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Wetted product will be very slippery.

VII. Handling and Storage

Handling:	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas fumes, vapor or spray in case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice.
Storage:	Keep container dry. Keep in a cool, well ventilated place. Ground all equipment containing material. Keep container tighly closed. Combustibles should be stored away from extreme heat and away from strong oxidizing agents. Avoid contaminating product with water.

VIII. Exposure Controls/Personal Protection

Engineering Controls:	N/A
Respiratory Protection:	Vapor respirator.
Skin Protection:	Gloves and apron.
Eye Protection:	Safety goggles.
Other Protective Equipment:	N/A
Hygenic Practices:	N/A

IX. Physical and Chemical Properties

Boiling Point:	>420° F	Vapor Density:	>14
Odor:	Kerosene-like.	Odor Threshold:	N/A
Appearance:	Oily slurry tan.	Evaporation Rate:	N/A
Solubility in H20:	NA	Specific Gravity:	1.02
Freeze Point:	N/A	pH at 50.0%:	6-8
Vapor Pressure:	N/A	Viscosity:	N/A
Physical State:	Liquid		
Coefficient of Water Oil Distribution:	N/A		

X. Stability and Reactivity

Conditions to Avoid:	N/A
Incompatability:	N/A
Hazardous Decomposition Products:	N/A
Hazardous Polymization:	N/A
Stability:	N/A

XI. Toxicological Properties

Toxicological Properties:	No product information is available.
Oral:	No product information is available.
Dermal:	No product information is available.
Inhalation:	No product information is available.

XII. Ecological Information

Ecological Properties:	No product information is available.
Ecotoxicity:	No product information is available.
Chemical Fate Information:	No product information is available.

XIII. Disposal Consideration

Disposal Method:	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.
RCRA Status:	No product information is available.

XIV. Transportation Information

DOT Proper Shipping Name:	Not DOT Regulated
DOT Technical Name:	
DOT Hazard Class:	
DOT Hazard Subclass:	
DOT UN/NA Number:	
Packing Group:	
Resp. Guide Page:	

XV. Regulatory Information

OSHA:	No Information
TSCA Status:	No information
CERCLA SARA:	No Information
SARA Section 313 Required Reporting:	

XVI. Other Information

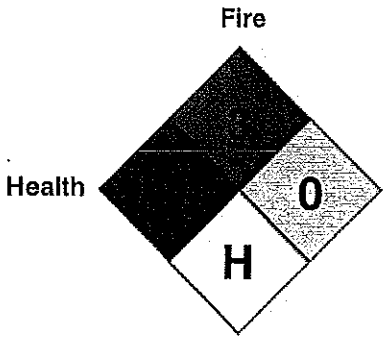
Other Information: NA = Not applicable ND = Not Determined NI = No Information NE = Not Established

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, or when used in conjunction with other products, exposures must be evaluated by the user so that appropriate handling practices and training programs can be established to ensure safe workplace operations. This information is confidential to Superior Well Services, Ltd. (SWSI) and intended solely for the use of the individual or entity to whom they are directly distributed. Distribution or use beyond the individual or entity is strictly prohibited without the consent of SWSI.

SUPERIOR
WELL SERVICES

HMIS Hazard Rating:

4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal



I. Chemical Product and Company Identification

Product Name:	Acid Inhibitor 2 (AI-2)
Identification #:	35-405-0002
Product Use/Class:	Acid Corrosion Inhibitor
Supplier:	Superior Well Services
Manufacturer:	Weatherford Fracturing Technologies
Emergency Contact:	CHEMTREC 1 (800) 424-9300
Prepared By:	RAA
Date Prepared:	03/17/2008

II. Composition/Information on Ingredients

Chemical Name:	Glycol Ether
CAS Number:	111-76-2
Percent by Mass Less Than:	10-30
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	25 ppm
Threshold Limit Value - Short Term Exposure Limit:	NE
Permissible Exposure Limit - Time Weighted Average:	25 ppm
Permissible Exposure Limit - Ceiling:	NE
Company Threshold Limit - Time Weighted Average:	NE
Skin:	NO
Chemical Name:	Propargyl Alcohol
CAS Number:	107-19-7
Percent by Mass Less Than:	10-30
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	1 ppm
Threshold Limit Value - Short Term Exposure Limit:	3 ppm
Permissible Exposure Limit - Time Weighted Average:	NE
Permissible Exposure Limit - Ceiling:	NE
Company Threshold Limit - Time Weighted Average:	NE
Skin:	NO
Chemical Name:	Isopropyl Alcohol
CAS Number:	67-63-0
Percent by Mass Less Than:	10-30
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	400 ppm
Threshold Limit Value - Short Term Exposure Limit:	500 ppm
Permissible Exposure Limit - Time Weighted Average:	400 ppm
Permissible Exposure Limit - Ceiling:	500 ppm
Company Threshold Limit - Time Weighted Average:	NE
Skin:	NO
Chemical Name:	Proprietary Component
CAS Number:	XXXX-XX-X
Percent by Mass Less Than:	3-7
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	NE
Threshold Limit Value - Short Term Exposure Limit:	NE
Permissible Exposure Limit - Time Weighted Average:	NE
Permissible Exposure Limit - Ceiling:	NE
Company Threshold Limit - Time Weighted Average:	NE
Skin:	NO

III. Hazardous Identification

Emergency Overview:	Harmful if absorbed through skin or swallowed. Flamable liquid and vapor. May cause flash fire or explosion.
Effects of Overexposure	
Eye Contact:	Severely irritating. If not removed promptly, product will injure eye tissue, which may result in permanent damage.
Skin Contact:	May cause skin irritation. Allergic reaction is possible. May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure to this material.
Inhalation:	POISON! May be fatal if inhaled. May be irritating to mucus membranes and lung tissue.
Ingestion:	POISON! Fatal if swallowed. May be irritating to mouth, throat, and stomach.
Chronic Harards:	Overexposure may cause kidney damage. May cause liver disorder (e.g. edema, proteinuria) and damage.

Primary Route(s) of Entry:	■ Skin Contact	■ Eye Contact	■ Ingestion	
	■ Skin Absorbtion	■ Inhalation		

IV. First Aid Measures

Eye Contact:	Immediately flush eye with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention if irritation persists.
Skin Contact:	Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing seperately before reuse.
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

V. Fire Fighting Measures

Flash Point:	85 F
Auto Ignition Temperature:	Not Determined
Lower Explosive Temp.:	1.1%
Upper Explosive Temp.:	12.0%
Extinguishing Media:	Alcohol Foam, CO2, Dry Chemical, Foam, Water Fog
Unusual Fire and Explosive Harards:	Vapors may form explosive mixture with air. Vapors can travel to a source of ignition and flash back. Flmmable liquid. Can release vapors that form explosive mixtures at temperatres at or above the flashpoint. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.
Special Fire Fighting Procedures:	Containers can build up pressure if exposed to heat (fire). As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Apply alcohol-type foam or all purpose foam by manufacturers recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires. Use water spray to cool containers.

VI. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:	Extinguish all possible ignition source until the area is determined to be free from fire or explosive hazards. Evacuate area.Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches. (See section VIII.) Wear a self-contained breathing apparatus and appropriate personal protective equipment. Spilled material should be contained and disposed of properly.

VII. Handling and Storage

Handling:	Wash thoroughly after handling. Handle all chemicals with care. Ground and bond containers when transferring materials.
Storage:	Keep away from heat, sparks, and flames. Keep container closed when not in use. Store in a cool, dry, well ventilated place away from incompatible materials. Store away from foodstuffs or animal feed.

VIII. Exposure Controls/Personal Protection

Engineering Controls:	Local exhaust and vetalilation may be necessary to control any air contaminants to within their TLVs during the use of this product.
Respiratory Protection:	A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge when airborne concentrations are expected to exceed exposure limits. Protection by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Skin Protection:	Where contact is likely, wear chemical resistant gloves, rubber boots, and chemical safety goggles plus a face shield.
Eye Protection:	Wear safety glasses with side sheilds (or goggles) and a face shield. Do not wear contact lenses.
Other Protective Equipment:	Where splashing is possible, full chemically resistant protective clothing (aicd suit) and boots are required. Emergency eyewash stations and deluge showers should be available in the work area.
Hygenic Practices:	Wash hands before eating. Use only in a well ventilated area. Remove contaminated clothing and wash before reuse. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing.

IX. Physical and Chemical Properties

Boiling Point:	180-340 F	Vapor Density:	Heavier than air
Odor:	Not Determined	Odor Threshold:	Not Determined
Appearance:	Dark Red	Evaporation Rate:	Faster than Butyl Acetate
Solubility In H20:	Complete	Specific Gravity:	0.9700
Freeze Point:	Not Determined	pH at 50.0%:	1.5
Vapor Pressure:	Not Determined	Viscosity:	Not Determined
Physical State:	Liquid		
Coefficient of Water Oil Distribution:	Not Determined		

X. Stability and Reactivity

Conditions to Avoid:	Excessive heat. Excessive heat causes the vapor pressure to increase rapidly.
Incompatability:	Reacts violently with oxidizing agents. Avoid contact with strong acids.
Hazardous Decomposition Products:	Carbon dioxide which can act as a asphyxiant. Carbon monoxide which is toxic if inhaled. Nitrogen oxide.
Hazardous Polymization:	Will not occur under normal conditions.
Stability:	This product is stable under normal storage conditions.

XI. Toxicological Properties

Toxicological Properties:	No product information is available.
Oral:	No product information is available.
Dermal:	No product information is available.
Inhalation:	No product information is available.

XII. Ecological Information

Ecological Properties:	No productinformation is available.
Ecotoxicity:	No product information is available.
Chemical Fate Information:	No product information is available.

XIII. Disposal Consideration

Disposal Method:	Consult local, state, and federal regulatory agencies for acceptable disposal procedures and disposal locations. Disposal in streams or sewers may be prohibited by federal, state, and local regulations.
RCRA Status:	DOO1-Characteristic of ignitability.

XIV. Transportation Information

DOT Proper Shipping Name:	Flammable liquids, toxic, n.o.s.
DOT Technical Name:	Contains Isopropanol and Propargyl Alcohol
DOT Hazard Class:	3
DOT Hazard Subclass:	
DOT UN/NA Number:	UN1992
Packing Group:	III
Resp. Guide Page:	

XV. Regulatory Information

OSHA:	Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)
TSCA Status:	All components of this product are listed on the Toxic Substance Control Act Inventory or are excluded from the listing requirements.
CERCLA SARA:	This product has been reviewed according to the EPA 'Hazard Categories' promulgated under the sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories.:
	Immediate Health Hazard, Chronic Health Hazard, Fire Hazard

SARA Section 313 Required Reporting:	Chemical	CAS Number	WT/WT%
	Glycol Ether	111-76-2	10-30

XVI. Other Information

Other Information: NA = Not applicable ND = Not Determined NI = No Information NE = Not Established

SUPERIOR
WELL SERVICES

1380 Route 286
Suite 121
Indiana, PA 15701

ICP-1000

MATERIAL SAFETY DATA SHEET

FOR EMERGENCY ASSISTANCE
CALL: INFOTRAC at 1-800-535-5053

FOR ADDITIONAL INFORMATION
CALL: 724-248-1001

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME: **ICP-1000**
CHEMICAL DESCRIPTION: Aqueous blend of propylene glycol and dispersant
PRODUCT CLASS: Specialty
VERSION: 07-26-11

SECTION 2: INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %	OSHA PEL	ACGIH TLV
Propylene glycol	57-55-6	20-50	None established	None established
Anionic copolymer	Proprietary	20-50	None established	None established

SECTION 3: HAZARDS IDENTIFICATION

**********EMERGENCY OVERVIEW**********

Appearance: Clear colorless liquid.
CAUTION:
May cause eye and skin irritation. Ingestion may cause gastrointestinal irritation.
Not an inhalation hazard unless respirable mists, aerosols or vapors are generated. If generated, mists, aerosols or vapors may cause respiratory tract irritation.

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POTENTIAL HEALTH EFFECTS:

EYE CONTACT: Contact may cause irritation.

SKIN CONTACT: Repeated contact may cause irritation.

INGESTION: Ingestion may cause gastrointestinal irritation.

INHALATION: If product mists, aerosols or vapors are generated and inhaled, respiratory tract irritation may occur.

SUBCHRONIC, CHRONIC: No information is available for this product. Information on the product component, propylene glycol, follows.

Repeated or prolonged exposure of the skin to propylene glycol may cause defatting and drying of the skin. In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.

CARCINOGENICITY:

NTP: No ingredients listed in this section
IARC: No ingredients listed in this section
OSHA: No ingredients listed in this section

SECTION 4: FIRST AID MEASURES

EYE CONTACT: In case of contact, flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally to ensure complete rinsing. If irritation occurs, get medical attention.

SKIN CONTACT: In case of skin contact, remove contaminated clothing and wash the affected areas thoroughly with plenty of soap and water. Wash contaminated clothing before reuse. If irritation occurs, get medical attention

INGESTION: If swallowed, do NOT induce vomiting. If victim is conscious and alert, give large quantities of water. Get medical attention. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: In case of ingestion, treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

INHALATION: If inhalation occurs, remove victim to fresh air. If breathing stops, give artificial respiration. If breathing is difficult, have a trained medical person give oxygen. Get medical attention if any breathing difficulties occur.

SECTION 5: FIRE-FIGHTING MEASURES

FLASHPOINT: Not available but expected to exceed 200 °F (93.3 °C)

LOWER FLAMMABLE LIMIT: Not applicable

UPPER FLAMMABLE LIMIT: Not applicable

AUTO-IGNITION TEMPERATURE: Not available

EXTINGUISHING MEDIA: Alcohol foam, water fog, carbon dioxide, or dry chemical. Do not use a direct stream of water or frothing may occur.

FIRE-FIGHTING INSTRUCTIONS: Exercise caution when fighting any chemical fire. A self-contained breathing apparatus and protective clothing are essential.

FIRE & EXPLOSION HAZARDS: Product emits toxic gases under fire conditions. A flammable concentration of propylene glycol vapor can accumulate at temperatures above 215 °F (101.7 °C).

DECOMPOSITION PRODUCTS: Thermal decomposition or combustion may produce oxides of carbon, nitrogen, sulfur, and sodium as well as aldehydes, lactic acid, pyruvic acid, and acetic acid.

NFPA CODES:

Health = 0 Flammability = 1 Reactivity = 0

Hazard Rating Scale: 0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Do not touch spilled material. Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure Controls/Personal Protection). Ventilate the spill area. Stop or reduce any leaks if it is safe to do so.

METHODS FOR CLEAN-UP:
Small spills: Soak up spill with an inert absorbent material (e.g. vermiculite, dry sand, earth). Do not use combustible materials, such as saw dust. Place residues in a suitable, covered, properly labeled container. Wash the affected area.
Large spills: Contain liquid using an inert absorbent material, by digging trenches or by diking. Reclaim into recovery or salvage drums or tank truck for proper disposal. Contact an approved waste hauler for disposal of contaminated recovered material. Dispose of material in compliance with regulations indicated in Section 13 (Disposal).

SECTION 7: HANDLING AND STORAGE

HANDLING:
Avoid contact with eyes, skin, and clothing.
Avoid breathing mist.
Use with adequate ventilation.
Wash thoroughly after handling.
Do not take internally.

Keep containers closed when not in use.
Ensure that containers are properly labeled.
Since empty containers may retain product residues (vapors, liquid), observe all warnings and precautions listed for the product.
Have emergency equipment (for fires, spills, leaks, etc.) readily available.

STORAGE:
Store product in a cool, dry, well-ventilated area away from incompatibles.
Avoid elevated temperatures.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE/FACE PROTECTION: Chemical splash goggles

SKIN PROTECTION: Chemical resistant gloves and protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

RESPIRATORY PROTECTION: If mists, vapors, or aerosols are generated, an approved respirator is recommended. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, and maintenance and inspection.

ENGINEERING CONTROLS: Use local ventilation exhaust or other engineering controls when mists, vapors or aerosols may be generated. Local exhaust ventilation if preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

WORK PRACTICES: An eye wash station and safety shower should be accessible in the immediate area of use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

pH: 3.5-5.0

SPECIFIC GRAVITY: 1.125-1.165 g/mL

SOLUBILITY IN WATER: Complete

BOILING POINT: Not available

FREEZING POINT: -14.8 °F (-26 °C)

VAPOR PRESSURE: Not available

VAPOR DENSITY: Not available

APPEARANCE AND ODOR: Clear, colorless liquid with mild or no odor

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid heat, flames, ignition sources, and incompatibles. Avoid temperatures above 250 °F (121 °C) since propylene glycol decomposes at temperatures exceeding that value.

INCOMPATIBILITIES: Strong oxidizing agents, strong bases, and strong acids

DECOMPOSITION PRODUCTS: Thermal decomposition or combustion may produce oxides of carbon, nitrogen, sulfur, and sodium as well as aldehydes, lactic acid, pyruvic acid, and acetic acid.

SECTION 11: TOXICOLOGICAL INFORMATION

Based on information below, propylene glycol is practically non-toxic by dermal or oral exposure.
The acute toxicity data listed below for the anionic copolymer is based on a similar product.

Test Material	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Propylene glycol	>20,000 mg/Kg	>10,000 mg/Kg	Not available
Anionic copolymer, as product	>5,000 mg/Kg	>2,000 mg/Kg	Not available

SECTION 12: ECOLOGICAL INFORMATION

Based on ingredient information listed below, the product is expected to be non-toxic to aquatic species.

Test Material	Aquatic Toxicity Data
Propylene glycol	Acute LC50 (Daphnia magna): 4,850-34,400 mg/L Acute LC50 (Fathead minnow): 46,500-54,900 mg/L Acute LC50 (Guppy): >10,000 mg/L Acute LC50 (Rainbow trout): 44,000 mg/L

Anionic copolymer	48 hr LC50 (Daphnia magna): 2,800 mg/L 96 hr LC50 (Bluegill sunfish): >10,000 mg/L 96 hr LC50 (Rainbow trout): 4,900 mg/L

SECTION 13: DISPOSAL

RCRA STATUS: Unused or discarded product, as sold, is not considered a RCRA Hazardous Waste.

DISPOSAL: Dispose of in accordance with local, state, and federal regulations.

SECTION 14: TRANSPORTATION

DOT CLASSIFICATION: Not regulated in domestic ground transportation.
Proper Shipping Name: Not applicable
Primary Hazard Class/Division: Not applicable
UN Number: Not applicable
Packing Group: Not applicable
Label: None

SECTION 15: REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: This product is not considered to be hazardous as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA: The ingredients of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA: EPA Hazardous Substances (40 CFR 302):

Chemical Name	CERCLA Reportable Quantity (RQ)
No ingredients have a CERCLA RQ.	

SARA TITLE III (Sections 302, 311, 312, and 313):

Section 302 Extremely Hazardous Substances (40 CFR 355):

Chemical Name	CAS#	RQ	TPQ
None			

Section 311 and 312 Health and Physical Hazards:

Immediate	Delayed	Fire	Pressure	Reactivity
no	no	no	no	no

Section 313 Toxic Chemicals (40 CFR 372):

Chemical Name	CAS Number	Percent by Weight
None		

SECTION 16: OTHER INFORMATION

HMIS RATINGS: Health = 0 Flammability = 1 Reactivity = 0

Hazard Rating Scale: 0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe

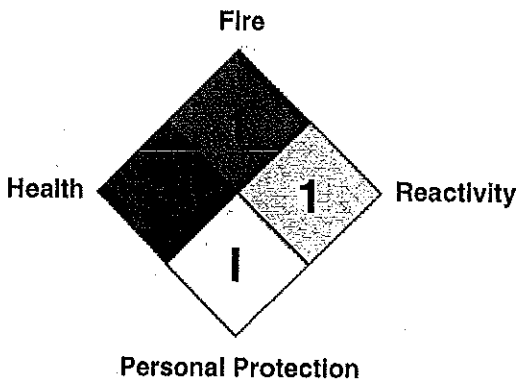
****

The preceding information is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change, and the conditions of handling and use or misuse are beyond our control, Superior Well Services makes no warranty, either express or implied, with respect to the completeness or continuing accuracy of the information contained herein, and disclaims all liability for reliance thereon. User should satisfy himself that he has all current data relevant to his particular use.

SUPERIOR
WELL SERVICES

HMIS Hazard Rating:

4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal



I. Chemical Product and Company Identification

Product Name:	Bio Clear 200
Identification #:	35-440-0200
Product Use/Class:	Biocide
Supplier:	Superior Well Services
Manufacturer:	Weatherford Fracturing Technologies
Emergency Contact:	CHEMTREC 1 (800) 424-9300
Prepared By:	KLH
Date Prepared:	05/20/2011

II. Composition/Information on Ingredients

Chemical Name:	2,2-Dibromo-3-Nitrilopropionamide
CAS Number:	10222-01-2
Percent by Mass Less Than:	20
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	None Established
Threshold Limit Value - Short Term Exposure Limit:	None Established
Permissible Exposure Limit - Time Weighted Average:	None Established
Permissible Exposure Limit - Ceiling:	None Established
Company Threshold Limit - Time Weighted Average:	None Established
Skin:	None Established

Chemical Name:	Polyethylene Glycol Mixture
CAS Number:	25322-68-3
Percent by Mass Less Than:	30-60
Exposure Limits	
Threshold Limit Value - Time Weighted Average:	NE
Threshold Limit Value - Short Term Exposure Limit:	NE
Permissible Exposure Limit - Time Weighted Average:	NE
Permissible Exposure Limit - Ceiling:	NE
Company Threshold Limit - Time Weighted Average:	NE
Skin:	No Information

III. Hazardous Identification

Emergency Overview:	DANGER! Corrosive material. Contact with this product may cause severe eye damage. MAY BE FATAL IF ABSORBED THROUGH SKIN. May cause sensitization by skin contact. Highly tocis to fish and/or other aquatic organisms. This product is not considered to be a carcinogen by IARC, ACGIH, NTP or OSHA.
Effects of Overexposure	
Eye Contact:	May cause chemical burns. May cause irritation with prolonged contact. Do not get this material in contact with eyes.
Skin Contact:	Prolonged contact may cause severe skin irritation with local redness and discomfort. Repeated exposure may cause irritation, even a burn. May cause sensitization of susceptible persons. Do not get this material in contact with skin.
Inhalation:	Excessive exposure may cause severe irritation to upper respiratory tract (nose and throat) and lungs. Do not breathe dust/fumes/gas/mist/vapors/spray.
Ingestion:	Harmful if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause serious injury, even death. Do not ingest.
Chronic Harards:	Excessive exposure may increase the blood and tissue levels of Bromine.

Primary Route(s) of Entry:	☐ Skin Contact	■ Eye Contact	☐ Ingestion	
	☐ Skin Absorbtion	■ Inhalation		

IV. First Aid Measures

Eye Contact:	Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an opthalmologist.
Skin Contact:	Remove contaminated clothing. Was skin with soap and plenty of water for 15-20 minutes. Call a physician or Poison Control Center immediately. Wash clothing seperately before reuse.
Inhalation:	Remove to fresh air. Do not use mouth-to-mouth method if victim inhaled the substance. If not breathing, give artificial respiration or give oxygen by trained personnel. Get medical attention immediately.
Ingestion:	If material is ingested, immediately contact a physician or poison control center. Do not induce vomiting without advice from poison control center. Drink 1 or 2 glasses of water. NOTE TO PHYSICIAN: If material is ingested, probable mucosal damage may contraindictate the use of gastric lavage. Treat the affected person appropriately. In case of shortness of breath, give oxygen. Keep victim warm. Symptoms may be delayed. GENERAL ADVICE: In case of shortness of breath, give oxygen. Keep victim warm. Call a physician if symptoms develop or persist. Ensure that medical personnel are aware of the materials involved, and take precautions to protect themselves.

V. Fire Fighting Measures

Flash Point:	> 359.6°F
Auto Ignition Temperature:	Not Determined
Lower Explosive Temp.:	N/A
Upper Explosive Temp.:	N/A
Extinguishing Media:	Water. Dry chemical, CO2, water spray or regular foam. Do not use a solid water stream as it may scatter and spread fire.
Unusual Fire and Explosive Harards:	May emit toxic fumes in fire.
Special Fire Fighting Procedures:	In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demanding breathing apparatus, protective clothing and face mask. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from a maximum distance or use manned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

VI. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:	PERSONAL PRECAUTION: Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away. Stay upwind. Keep out of low areas. METHODS FOR CONTAINMENT: Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas. METHODS FOR CLEANING UP: When handling or dealing with spills, wear protective clothing as indicated in the Personal Protective Equipment section. Cover wet spills with 10% sodium bicarbonate solution, water and then an inert absorbent before sweeping up and decomposing, isolate unsealed drum in the open or in a well-ventilated area. Flood with 10% sodium bicarbonate solution and large volumes of water, if necessary.

VII. Handling and Storage

Handling:	Do not handle or store near an open flame, heat or other sources of ignition. All equipment used when handling the product must be grounded. Do not breathe vapors or spray mist. Wear self-contained breathing apparatus and protective suit. Use only with adequate ventilation. Avoid release to the environment. Wash thoroughly after handling.
Storage:	Keep locked-up. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build up by using common bonding and grounding techniques. Keep in a well-ventilated place. Keep out of the reach of children. Keep away from heat and flame.

VIII. Exposure Controls/Personal Protection

Engineering Controls:	Ensure adequate ventilation, especially in confined areas.
Respiratory Protection:	A NIOSH/MSHA approved particulate respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by particulate respirators is limited.
Skin Protection:	Were chemical protective equipment that is specifically recommended by the manufacturer. Wear appropriate chemical resistant clothing. Closed-toe shoes recommended. Apron boots.
Eye Protection:	Wear safety glasses with side sheilds (or goggles) and a face shield.
Other Protective Equipment:	Emergency eyewash stations and deluge showers should be available in the work area.
Hygenic Practices:	Wash hands before eating. Remove contaminated clothing and wash before reuse. Use only with adequate ventilation. Avoid contact with eyes, skin, and clothing.

IX. Physical and Chemical Properties

Boiling Point:	> 158°F	Vapor Density:	Lighter than air
Odor:	Mild.	Odor Threshold:	No Information
Appearance:	Clear.	Evaporation Rate:	No Information
Solubility in H20:	Miscible in all proportions.	Specific Gravity:	1.250 mg/l
Freeze Point:	< -30°F	pH at 50.0%:	1.5-5
Vapor Pressure:	18.9 mm Hg @ 25°C (estimated)	Viscosity:	No Information
Physical State:	Liquid		
Coefficient of Water Oil Distribution:	No Information		

X. Stability and Reactivity

Conditions to Avoid:	Heat, flames, and sparks.
Incompatability:	Avoid contact with oxidizers, strong bases and metals like aluminum.
Hazardous Decomposition Products:	N/A
Hazardous Polymization:	Will not occur under normal conditions.
Stability:	This product is stable under normal storage conditions.

XI. Toxicological Properties

Toxicological Properties:	Not expected to be hazardous by OSHA criteria. Excessive exposure may increase the blood and tissue levels of bromine. Observations in animals include kidney effects following repeated ingestion of active ingredient, but no evidence of systematic toxicity following repeated dermal exposure at maximum attainable doses.
Oral:	Acute LD50: >2,000 mg/kg (rat), POLYETHLYENE GLYCOL: LD50: 28 g/kg (rat)
Dermal:	Acute LD50: 510 mg/kg (rat), POLYETHYLENE GLYCOL: LD50: > 20 g/kg (rabbit)
Inhalation:	Acute LD50: 1.25 - 1.4 mg/l/4h (rat)

XII. Ecological Information

Ecological Properties:	No Information
Ecotoxicity:	Components of this product have been identified as having potential environmental concerns. LC50 3.6 mg/l estimated, rainbow trout, 96 hours. EC50 2.5 mg/l estimated, daphnia, 48 hours.
Chemical Fate Information:	No information

XIII. Disposal Consideration

Disposal Method:	Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste, according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of in accordance with all aplicable regulations.
RCRA Status:	Not Determined.

XIV. Transportation Information

DOT Proper Shipping Name:	Not DOT Regulated
DOT Technical Name:	
DOT Hazard Class:	
DOT Hazard Subclass:	
DOT UN/NA Number:	
Packing Group:	
Resp. Guide Page:	

XV. Regulatory Information

OSHA:	No OSHA information listed.		
TSCA Status:	All components of this porduct are listed on the Toxic Substance Control Act Inventory or are excluded from the listing requrements.		
CERCLA SARA:	This product has been reviewed according to the EPA 'Hazard Categories' promulgated under the sections 311 and 312 of the Superfund Amendment and Reautorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: Immediate Health Hazard, Chronic Health Hazard, Fire Hazard		
SARA Section 313 Required Reporting:	Chemical	CAS Number	WT/WT%
	2,2-Dibromo-3-Nitrilopropionamide	10222-01-2	20

XVI. Other Information

Other Information: NA = Not applicable ND = Not Determined NI = No Information NE = Not Established